

REMARKS

The Official Action mailed February 23, 2007, has been received and its contents carefully noted. This response is filed within three months of the mailing date of the Official Action and therefore is believed to be timely without extension of time. Accordingly, the Applicant respectfully submits that this response is being timely filed.

The Applicant notes with appreciation the consideration of the Information Disclosure Statements filed on January 14, 2004; and December 21, 2005.

Claims 1-18 and 31-46 are pending in the present application prior, of which claims 1, 10 and 31 are independent. The Applicant notes with appreciation the indication of the allowability of dependent claims 43-45 (page 5, Paper No. 20070125). Claims 1, 10 and 31 have been amended to better recite the features of the present invention. For the reasons set forth in detail below, all claims are believed to be in condition for allowance. Favorable reconsideration is requested.

Paragraph 2 of the Official Action rejects claims 1-9 under 35 U.S.C. § 112, second paragraph, noting that the recitation of "said square or rectangular cross-section" lacks antecedent basis. In response, claim 1 has been amended to positively recite "a square or rectangular cross-section." The Applicant respectfully submits that amended claim 1 is definite. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 112 are in order and respectfully requested.

Paragraph 3 of the Official Action rejects claims 1, 2, 4, 8-11, 13, 17, 18, 31, 32, 34, 38-42 and 46 as anticipated by U.S. Patent No. 5,622,567 to Kojima. (Although the Official Action includes claims "17-32" in the list of rejected claims at page 3, it is noted that claims 19-30 were canceled in the *Amendment* filed December 21, 2005.) The Applicant respectfully submits that an anticipation rejection cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a

single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Independent claim 1 has been amended to recite an optical system for uniforming an energy distribution of each of a plurality of laser beams by synthesizing each of the plurality of laser beams having different wavelengths from each other into a laser beam having a square or rectangular cross-section on an object to be irradiated. Independent claims 10 and 31 have been amended to recite an optical system for uniforming an energy distribution of each of a plurality of laser beams by synthesizing each of the plurality of laser beams having different wavelengths from each other into a laser beam having a linear cross-section. These features are supported in the present specification, for example, by page 24, last paragraph, to page 26, first paragraph. For the reasons provided below, the Applicant respectfully submits that Kojima does not teach the above-referenced features of the present invention, either explicitly or inherently.

The Official Action asserts that Kojima discloses "an optical system 7 and 9 for [uniforming] an energy distribution of each of laser beams and for processing each of said plurality of laser beams having different wavelengths from each other into said square or rectangular cross-section on said surface [of] an object 5 to be irradiated" (page 3, Paper No. 20070125; referring to Figure 14). The Applicant respectfully disagrees and traverses the assertions in the Official Action.

While Kojima appears to disclose a condenser lens 9 such as a cylindrical lens at column 24, line 5, and in Figure 3, Kojima simply discloses an inlet window 7 of chamber 1, not an optical system at column 34, line 61 and in Figure 32. Also, Kojima appears to simply disclose "that the surface of the target (5) is irradiated with the beam having uniform light intensity density distribution" (abstract). However, Kojima does not teach synthesizing each of a plurality of laser beams having different wavelengths from each other into a laser beam having a square or rectangular cross-section or having a linear cross-section, either explicitly or inherently.

Since Kojima does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102 are in order and respectfully requested.

Paragraph 4 of the Official Action rejects claims 3, 5-7, 12, 14-16, 33 and 35-37 as obvious based on the combination of Kojima and U.S. Patent No. 5,673,281 to Byer. The Applicant respectfully submits that a *prima facie* case of obviousness cannot be maintained against the independent claims of the present application, as amended.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Please incorporate the arguments above with respect to the deficiencies in Kojima. Byer does not cure the deficiencies in Kojima. The Official Action relies on Byer to allegedly teach the features of the dependent claims. Specifically, the Official Action relies on Byer to allegedly teach a zigzag slab type YAG laser with a second

harmonic beam generated by a nonlinear crystal (pages 4-5, Paper No. 20070125). However, Kojima and Byer, either alone or in combination, do not teach or suggest synthesizing each of a plurality of laser beams having different wavelengths from each other into a laser beam having a square or rectangular cross-section or having a linear cross-section. Since Kojima and Byer do not teach or suggest all the claim limitations, a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Eric J. Robinson
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.
PMB 955
21010 Southbank Street
Potomac Falls, Virginia 20165
(571) 434-6789